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## NOTICE OF ALLOWANCE AND FEE(S) DUE

21186 7590 12/15/2011 SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402 EXAMINER

TODD, GREGORY G

ART UNIT PAPER NUMBER

2457

DATE MAILED: 12/15/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/491,991	01/26/2000	Dean Cheng	1370.323US1	9322

TITLE OF INVENTION: MANAGING NETWORK CONGESTION USING DYNAMICALLY ADVERTISED CONGESTION STATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1740	S0	\$0	\$1740	03/15/2012

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 3S U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address and indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or by indicating a separate "FEE ADDRESS" for maintenance fee notification

12/15/2011 SCHWEGMAN, LUNDBERG & WOESSNER, P.A.

P.O. BOX 2938 MINNEAPOLIS MN 55402 Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Feeds () Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (5/1) 273-2885, on the date indicated below.

(Depositor's name (Signature (Dat

APPLICATION NO FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 09/491 991 01/26/2000 Dean Cheno 1370 323US1 TITLE OF INVENTION: MANAGING NETWORK CONGESTION USING DYNAMICALLY ADVERTISED CONGESTION STATUS

APPLN, TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1740 SO 50 \$1740 03/15/2012 APTIMIT CT ASSISTRCT ASS TODD GREGORY G 2457 709-235000 1. Change of correspondence address or indication of "Fee Address" (37 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is Number is required. listed, no name will be printed.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent): 🔲 Individual 🚨 Corporation or other private group entity 🚨 Government 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ Issue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. Advance Order - # of Copies The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office

Authorized Signature Date Typed or printed name Registration No.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time your require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patert and Trademark Officer. U.S. Peterstreat of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450.

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MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER	

2457 DATE MAILED: 12/15/2011

## Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 1634 day(s). Any patent to issue from the above-identified application will include an indication of the 1634 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2): (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom
  of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of
  records may be disclosed to the Department of Justice to determine whether disclosure of these
  records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement necotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his-fher designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2004 and 2006. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

# Notice of Allowability

Application No.	Applicant(s)	
09/491,991	CHENG ET AL.	
Examiner	Art Unit	
GREGORY TODD	2457	

-- The MALLING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABLITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. A nelection was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_\_; the restriction requirement and election have been incorporated into this action.

3. A The allowed claim(s) is/are 3.8.9.20.25.26.37.54.59 and 60.

4. A Acknowledoment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

\* Certified copies not received:

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached

1) hereto or 2) to Paper No./Mail Date \_\_\_\_\_.

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

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1. Notice of References Cited (PTO-892)

2. Notice of Draftperson's Patent Drawing Review (PTO-948)

 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date

Examiner's Comment Regarding Requirement for Deposit of Biological Material

ill Date \_\_\_\_\_

9. 🔲 Other \_\_

5. Notice of Informal Patent Application

 Interview Summary (PTO-413), Paper No./Mail Date

7. X Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

/Gregory G Todd/

Primary Examiner, Art Unit 2457

1. In response to the BPAI Decision filed, 29 August 2011, of application filed, with

the above serial number, on 26 January 2000 in which the rejection of claims 1-2, 4-7,

10-19, 21-24, 27-36, 38-53, 55-58, and 61-68 has been affirmed and the rejection of

claims 3, 8, 9, 20, 25, 26, 37, 54, 59, and 60 has been reversed.

2. An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be  $\,$ 

submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the claims:

1-2. (cancelled)

3. (currently amended) A method to manage congestion in a network, the

method comprising:

determining a congestion status associated with a node in a single peer group or

a hierarchical level in the network, the congestion status being represented by a transit

flag accessible to at least one other node in the single peer group or the hierarchical

level to determine if a call is routed through the node; and

broadcasting the congestion status from the node to the at least one other node

in the single peer group or the hierarchical level,[.]

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### The method of claim 1

wherein determining the congestion status comprises:

setting the transit flag, if the congestion status indicates a congestion, to indicate that a call through the node is avoided unless the node is a terminating node; and resetting the transit flag, if the congestion status does not indicate a congestion, to indicate that the node is not restricted for transit.

- 4-7. (cancelled)
- 10-19. (cancelled)
- 20. (currently amended) A computer program product comprising:

a non-transitory computer usable medium having computer program code

embodied therein for managing congestion in a network, the computer program product
having:

computer readable program code for determining a congestion status associated with a node in a single peer group or a hierarchical level in the network, the congestion status being represented by a transit flag accessible to at least one other node in the single peer group or the hierarchical level to determine if a call is routed through the node; and

computer readable program code for broadcasting the congestion status from the node to the at least one other node in the single peer group or the hierarchical level.[.]

The computer program product of claim 18

wherein the computer readable program code for determining the congestion status comprises:

Art Unit: 2457

computer readable program code for setting the transit flag, if the congestion status indicates a congestion, to indicate that a call through the node is avoided unless the node is a terminating node; and

computer readable program code for resetting the transit flag, if the congestion status does not indicate a congestion, to indicate that the node is not restricted for transit.

21-24. (cancelled)

27-36. (cancelled)

37. (currently amended) A system interfacing to a network comprising:

a processor coupled to the network; and

a memory coupled to the processor, the memory containing program code for managing congestion in the network, the program code when executed causing the processor to:

determine a congestion status associated with a node in a single peer group or a hierarchical level in the network, the congestion status being represented by a transit flag accessible to at least one other node in the single peer group or the hierarchical level to determine if a call is routed through the node; and

broadcast the congestion status from the node to the at least one other node in the single peer group or the hierarchical level.[.]

The system of claim 35

wherein the program code causing the processor to determine the congestion status causes the processor to:

indicate that the node is not restricted for transit

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set the transit flag, if the congestion status indicates a congestion, to indicate that a call through the node is avoided unless the node is a terminating node; and reset the transit flag, if the congestion status does

38-53. (cancelled)

54. (currently amended) <u>An apparatus to manage congestion in a network</u> comprising:

means for determining a congestion status associated with a node in a single peer group or a hierarchical level in the network, the congestion status being represented by a transit flag accessible to at least one other node in the single peer group or the hierarchical level to determine if a call is routed through the node; and means for broadcasting the congestion status from the node to the at least one other node in the single peer group or the hierarchical level.[.]

The apparatus of claim 52-wherein the means for determining the congestion status comprises:

means for setting the transit flag, if the congestion status indicates a congestion, to indicate that a call through the node is avoided unless the node is a terminating node; and

means for resetting the transit flag, if the congestion status does not indicate a congestion, to indicate that the node is not restricted for transit.

55-58. (cancelled)

61-68. (cancelled)

Art Unit: 2457

The following is an examiner's statement of reasons for allowance: The Board of Patent Appeals and Interferences affirmed the rejection(s) against independent claim(s) 1, 10, 18, 27, 35, 44, 52, 61, and thus claims 10, 27, 44, and 61 and all claims dependent thereon are herein cancelled, but reversed all rejections against claim(s) 3, 8, 9, 20, 25, 26, 37, 54, 59, and 60 dependent thereon, wherein the Board determined that the "Examiner erred in finding that Fukuta and Proctor disclose avoiding sending a call through the congested node unless the node is a terminating node, as recited in claims 3, 20, 37, and 54". The Examiner has consequently amended the claims in accordance with the MPEP section 1214.06. Prosecution is closed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY TODD whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory G Todd/ Primary Examiner, Art Unit 2457